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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/900,623	07/06/2001	Paul Aubin	P48-1240-1	7380

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EXAMINER

FEGGINS, KRISTAL J

ART UNIT	PAPER NUMBER
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2861

DATE MAILED: 10/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/900,623

Applicant(s)

AUBIN ET AL.

Examiner

K. Feggins

Art Unit

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-- **Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

2. Claims 1-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Wood et al. (6,392,681 B1).

Wood et al. disclose the following claimed limitations:

* a printer having a printhead assembly for printing on a sheet material disposed on a worksurface, said printhead assembly including a plurality of printing elements (Abstract),

* a printhead support structure for supporting said printhead assembly(fig 1);

* means for securing said printhead assembly to said printhead support structure(col 28, lines 50-67, figs 2, 4, 5, 19A);

* means for adjusting angular orientation of said plurality of printing elements of said printhead assembly with respect to said worksurface (col 28, lines 50-67, col 29, lines 1-5, figs 2, 4, 5, 19A);

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* wherein said means for securing said printhead assembly to said printhead support structure is a pin for attaching said printhead assembly to said printhead support structure (col 13, lines 48-64, col 28, lines 50-67, col 29, lines 1-5, figs 2, 4, 5, 19A);

* said means for adjusting angular orientation is at least one means for engaging said pin, said at least one means for engaging being supported by said printhead assembly, said at least one means for engaging allowing adjustment of said printhead assembly to properly position said printing elements with respect to said worksurface (col 13, lines 48-64, col 28, lines 50-67, col 29, lines 1-5, figs 2, 4, 5, 19A);

* wherein said pin is a trunnion pin (col 13, lines 48-64, figs 2, 4, 5, 19A);

* wherein said pin fits through said printhead assembly and engages said printhead support structure (col 13, lines 48-64, col 28, lines 50-67, col 29, lines 1-5, figs 2, 4, 5, 19A);

* wherein said pin includes a recessed portion/cutaway/ for said at least one means for engaging to engage said recessed portion of said pin (col 13, lines 48-64, col 28, lines 50-67, col 29, lines 1-5, figs 2, 4, 5, 19A);

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* wherein said means for engaging is a set screw fitting into a threaded opening/aperture/ defined within said printhead assembly to engage said pin (col 13, lines 48-64, col 28, lines 50-67, col 29, lines 1-5, figs 2, 4, 5, 19A);

* wherein said set screw/trunnion pin/ is adjusted to affect adjustment of said printhead assembly position to orient said printing elements properly with respect to said worksurface (col 13, lines 48-64, col 28, lines 50-67, col 29, lines 1-5, figs 2, 4, 5, 19A);

* wherein said printhead support structure removably supports said printhead assembly (col 13, lines 48-64, col 28, lines 50-67, col 29, lines 1-5, figs 2, 4, 5, 19A);

* a printer having a printhead assembly for printing on a sheet material disposed on a worksurface, said printhead assembly including a plurality of printing elements (Abstract, col 14, lines 51-67),

* a printhead support structure for removably supporting said printhead assembly (col 13, lines 48-64, col 28, lines 50-67, col 29, lines 1-5, figs 2, 4, 5, 19A);

* a pin for removably securing said printhead assembly to said printhead support structure, said pin fitting through said printhead assembly and engaging said printhead support structure (col 13, lines 48-64, col 28, lines 50-67, col 29, lines 1-5, figs 2, 4, 5, 19A);

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* at least one set screw engaging said pin for adjusting angular orientation of said printing elements of said printhead assembly with respect to said worksurface (col 13, lines 48-64, col 28, lines 50-67, col 29, lines 1-5, figs 2, 4, 5, 19A);

* wherein said pin fits through an aperture formed within said printhead assembly with said aperture having a first aperture portion and a second aperture portion, said second aperture portion having an oval shape to allow relative movement of said pin and said printhead assembly (col 13, lines 48-64, col 28, lines 50-67, col 29, lines 1-5, figs 2, 4, 5, 19A);

* said set screw fits through a set screw opening formed within said printhead assembly to allow said set screw to engage said pin such that when said set screw is adjusted, relative movement of said pin and said printhead assembly occurs, thereby properly orienting said printing elements with respect to said worksurface (col 13, lines 48-64, col 28, lines 50-67, col 29, lines 1-5, figs 2, 4, 5, 19A);

* a method for adjusting orientation of a removable printhead assembly within a printer (Abstract, col 13, lines 48-64, col 28, lines 50-67, col 29, lines 1-5, figs 2, 4, 5, 19A);

* positioning said printhead assembly adjacent to a printhead support structure; securing said printhead assembly to said printhead supporting structure (col 13, lines 48-64, col 28, lines 50-67, col 29, lines 1-5, figs 2, 4, 5, 19A);

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* adjusting position of said printhead assembly within said printhead supporting structure for a plurality of printing elements of said printhead assembly to be properly oriented with respect to a worksurface by adjusting means for adjusting orientation of said printing elements with respect to said worksurface (col 13, lines 48-64, col 14, lines 51-67, col 28, lines 50-67, col 29, lines 1-5, figs 2, 4, 5, 19A);

* the steps of checking whether said printing elements are properly positioned with respect to said worksurface (col 27, lines 17-67, col 28, lines 1-3);

* readjusting said means for adjusting for correcting orientation of said printing elements with respect to said worksurface (col 27, lines 17-67, col 28, lines 1-3);

* wherein said step of adjusting includes a step of adjusting at least one set screw that engages a pin supporting said printhead assembly within said printhead supporting structure (col 27, lines 17-67, col 28, lines 1-3);

* a printer having a printhead assembly for printing on a sheet material disposed on a worksurface (Abstract, fig1)

* a printhead support structure for supporting said printhead assembly (Abstract, fig1)

* means for securing said printhead assembly to said printhead support structure (col 13, lines 48-64, col 14, lines 51-67, col 28, lines 50-67, col 29, lines 1-5, figs 2, 4, 5, 19A);

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* means for adjusting skew of said printhead assembly with respect to an edge of said sheet material (col 27, lines 17-67, col 28, lines 1-3);

* wherein said means for securing said printhead assembly (col 13, lines 48-64, col 14, lines 51-67, col 28, lines 50-67, col 29, lines 1-5, figs 2, 4, 5, 19A);

* a pin having a pin body and a pin surface, said pin securing said printhead assembly within said printhead assembly structure (col 13, lines 48-64, col 14, lines 51-67, col 28, lines 50-67, col 29, lines 1-5, figs 2, 4, 5, 19A);

* wherein said means for adjusting skew (col 27, lines 17-67, col 28, lines 1-3);

* at least one cam/cantilever arm/ cooperating with said pin to adjust position of said printhead with respect to said edge of said sheet material (col 13, lines 48-64, col 14, lines 51-67, col 28, lines 50-67, col 29, lines 1-5, figs 2, 4, 5, 19A);

* a printer having a printhead assembly for printing on a sheet material disposed on a worksurface (fig 1)

* a printhead support structure for removably supporting said printhead assembly (col 13, lines 48-64, col 14, lines 51-67, col 28, lines 50-67, col 29, lines 1-5, figs 2, 4, 5, 19A);

* a pin for securing said printhead assembly to said printhead support structure, said pin fitting through said printhead assembly and engaging said printhead support

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structure (col 13, lines 48-64, col 14, lines 51-67, col 28, lines 50-67, col 29, lines 1-5, figs 2, 4, 5, 19A);

* at least one cam/cantilever arm/ cooperating with said pin to adjust position of said printhead with respect to said edge of said strip material (col 13, lines 48-64, col 14, lines 51-67, col 28, lines 50-67, col 29, lines 1-5, figs 2, 4, 5, 19A);

* wherein said pin fits through an aperture formed within said printhead assembly (col 13, lines 48-64, col 14, lines 51-67, col 28, lines 50-67, col 29, lines 1-5, figs 2, 4, 5, 19A);

* said cam fits through a cam opening/aperture/ formed within said printhead assembly to allow said cam to cooperate with said pin such that when said cam is adjusted, said printhead assembly is moved relative to said edge of said sheet material for proper printing operation (col 13, lines 48-64, col 14, lines 51-67, col 28, lines 50-67, col 29, lines 1-5, figs 2, 4, 5, 19A);

* at least one cam screw positioned in a cam screw opening formed within said printhead assembly substantially adjacent to said cam to maintain said cam in place (col 13, lines 48-64, col 14, lines 51-67, col 28, lines 50-67, col 29, lines 1-5, figs 2, 4, 5, 19A);

* a method for adjusting skew of a printhead assembly with respect to an edge of a strip material disposed on a worksurface (col 27, lines 17-67, col 28, lines 1-3);

* positioning said printhead assembly adjacent to a printhead support structure (col 13, lines 48-64, col 14, lines 51-67)

* securing said printhead assembly to said printhead support structure (col 13, lines 48-64, col 14, lines 51-67, col 28, lines 50-67, col 29, lines 1-5, figs 2, 4, 5, 19A);

* adjusting a mechanism for adjusting skew of said printhead assembly with respect to an edge of strip material to ensure proper orientation of said printhead assembly with respect to said edge of said strip material disposed on said worksurface (col 27, lines 17-67, col 28, lines 1-3);

* checking whether said printhead assembly is printing properly with respect to said edge of said strip material disposed on said worksurface (col 27, lines 17-67, col 28, lines 1-3);

* readjusting said mechanism for adjusting skew to ensure proper orientation of said printhead assembly with respect to said edge of said strip material disposed on said worksurface (col 27, lines 17-67, col 28, lines 1-3);

* adjusting at least one cam to engage a pin securing said printhead assembly to said printhead support structure for proper positioning of said printhead assembly (col 13, lines 48-64, col 14, lines 51-67, col 28, lines 50-67, col 29, lines 1-5, figs 2, 4, 5, 19A);

* means for adjusting skew of said printhead assembly with respect to an edge of said sheet material (col 24, Printing Sheet Alignment and Tracking, col 27, lines 17-67, col 28, lines 1-3);

* wherein said means for securing said printhead assembly to said printhead support structure is a pin for attaching said printhead assembly to said printhead support structure (col 13, lines 48-64, col 14, lines 51-67, col 28, lines 50-67, col 29, lines 1-5, figs 2, 4, 5, 19A);

* said means for adjusting angular orientation is at least one set screw engaging said pin for adjusting angular orientation of said printing elements of said printhead assembly with respect to said worksurface (col 24, Printing Sheet Alignment and Tracking, col 27, lines 17-67, col 28, lines 1-3);

* said means for adjusting skew is at least one cam cooperating with said pin to adjust position of said printhead with respect to said edge of said strip material (col 24, Printing Sheet Alignment and Tracking, col 27, lines 17-67, col 28, lines 1-3).

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Isogai (US 5436772) discloses a thermal transfer printing apparatus in which a thermal head having a series of selectively energized heating

elements. Kapushinski et al. (US 6,452,620 B1) disclose methods an apparatus for improved thermal printing.


Communication With The USPTO

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to K. Feggins whose telephone number is 703-306-4548. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. Hilten can be reached on 703-308-0719. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.


KF
September 26, 2002


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